REMARKS

The Office Action dated October 18, 2005 has been received and carefully noted. The following remarks are submitted as a full and complete response thereto.

Claims 20-38 are pending in the present application, and are respectfully submitted for consideration.

Claims 20-21, 23-25 and 29-38 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,553,229 (Dent) in view of U.S. Patent No. 6,008,569 (Bach et al.). The Office Action took the position that Dent taught all the elements of these claims except a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of the at least one strongest signal with respect to the others of a plurality of signals. The Office Action then alleged that Bach provided those elements of the claims missing from Dent. Applicant respectfully traverses the obviousness rejection and submits that the cited references, either alone or in combination, do not disclose or suggest all the features of any of the presently pending claims.

Claim 20, upon which claims 21, 24, 29-31 and 34 are dependent, recites a receiver for receiving a plurality of different signals at the same time. The receiver includes means for identifying at least one strongest signal of the plurality of different signals. The receiver also includes a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of the at least one strongest signal with respect to the other of the plurality of signals. The filter includes an

input to receive the plurality of different signals and an output providing the plurality of different signals with signals within the frequency band of the one strongest signal being attenuated.

Claim 37 recites a base station incorporating a receiver for receiving a plurality of different signals at the same time. The receiver includes means for identifying at least one strongest signal of the plurality of different signals and a filter for attenuating the at least one strongest signal with respect to the other of the plurality of signals. The filter has an input to receive the plurality of different signals and an output providing the plurality of different signals with the at least one strongest signal being attenuated.

Claim 38 recites a method for receiving a plurality of different signals at the same time. The method includes identifying at least one strongest signal of the plurality of different signals. The method also includes filtering the at least one strongest signal with respect to the other of the plurality of signals by a filter having an input to receive the plurality of different signals and an output providing the plurality of different signals with the at least one strongest signal being attenuated with respect to the other of the plurality of signals.

As discussed in the specification, examples of the present invention enable the reduction of resources and to minimize the effects of the variation of the strength of the signals received at a base transceiver station. These features may allow a receiver to be used for more than one channel. It is respectfully submitted that cited references fail to

disclose or suggest all the elements of any of the presently pending claims. Therefore, Dent and Bach fail to provide the critical and unobvious advantages discussed above.

Dent relates to signal scanning systems and methods for multiple-mode cellular radiotelephones. Dent describes using a further scan in the narrowband mode to locate a narrow bandwidth channel containing the strongest signal when significant signal energy is identified in the wider bandwidth. A mobile phone scans a large number of cellular channels to detect a channel containing at least one TDMA burst transmission. A channel should be scanned when the burst transmission is present. Dent describes signal acquisition proceeding by prioritizing the channels according to signal strength and tuning to the channels in order of priority to attempt to decode a signal. When significant energy is identified in the larger bandwidth, a further scan using the narrowband filter may be instituted to precisely locate the 30 kHz channel containing the strongest signal. When the existence of a signal has been narrowed down to a specific signal, an attempt is made to decode a control channel.

Bach relates to method and apparatus for receiving a plurality of signals having different frequency bandwidths. Signals within a first undesired frequency spectrum are attenuated by a first filter. Referring to Figure 3 of Bach, a low pass filter 302 receives and allows only desired system signals. The resulting frequency spectrum is frequency shifted by mixing the desired signal and the remaining plurality of signals 204 with a local oscillator signal LO1. The plurality of signals 204 are frequency shifted so that each signal of the plurality of signals 204 is at a frequency equal to the difference of the

original frequency of the particular signal and LO1. The frequency shifted signals at the output of amplifier 312 are filtered by a bandpass filter 314. Undesired signals within a first undesired frequency band are attenuated by bandpass filter 314. Bandpass filter 314 has a frequency pass band slightly wider than the frequency bandwidth of signal having the largest frequency bandwidth of plurality of signals 204. Signals within a frequency pass band pass through bandpass filter 314 and are frequency shifted by mixing the signals with a second local oscillator signal LO2. An automatic gain control loop 322 maintains the amplitude of desired signal 202 at a level required by demodulator back-end 328.

Applicant submits that neither Dent nor Back disclose or suggest at least the feature of a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of a strongest signal with respect to other of a plurality of signals. Applicant notes that the Office Action states Dent "does not teach a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band." Thus, Dent does not disclose or suggest at least this feature of the claims. Applicants submit that Bach, either alone or in combination with Dent, also does not disclose or suggest at least this feature of the claims.

As discussed above, Bach describes using a fixed passband filter. For example, filter 314 is used in conjunction with local oscillation signals to attenuate the signals. Bach does not disclose or suggest filter 314 being adjustable. Instead, signals LO1 and LO2 generated according to the frequency of the desired signal, and then mixed with the

signals. This aspect of Bach does not disclose or suggest an adjustable stop-band filter for selecting strong signals. Further, applicant submits that Bach does not disclose or suggest a filter for attenuating the strongest signal with respect to the other of the plurality of signals. The cited references do not disclose or suggest adjusting or attenuating according to other signals of a plurality of signals. Instead, the cited references describe using a reference signal to mix with the signals for adjustment.

In contrast, present claim 20 recites "a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of said at least one strongest signal with respect to the other of said plurality of signals." Claim 37 recites "a filter for attenuating said at least one strongest signal with respect to the other of said plurality of signals." Claim 38 recites features similar to claim 37, but is drawn to a method. The remaining dependent claims also are allowable by virtue of their dependence upon the allowable independent claims. Applicant respectfully submits that the cited reference does not disclose or suggest at least these features of the presently pending claims. Thus, applicant respectfully requests that the obviousness rejection of claims 20-21, 23-25 and 29-38 be withdrawn.

Claim 22 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Dent in view of U.S. Patent No. 3,783,397 (Dishal et al.). The Office Action took the position that Dent taught all the elements of claim 22 except a notch filter. The Office Action then alleged that Dishal provided those elements of claim 22 missing from Dent. Applicant respectfully traverses the obviousness rejection and submits that the

cited references, either alone or in combination, do not disclose or suggest all the features of any of the presently pending claims.

Claim 22 depends directly from claim 20. Claim 20 is summarized above. Applicant submits that claim 22 includes the features of claim 20, as well as other features.

Dent is discussed above. Applicant submits Dent does not disclose or suggest all the features of claim 22 as discussed above.

Dishal relates to selection and processing system for signals, including frequency discriminator. Dishal describes a system where the received signals are mixed with an adjustable signal to shift the frequencies of the received signals so that an interfering signal matches the frequency band of a notch filter. Referring to Figure 1 of Dishal, signal selection circuitry 1 and signal processing circuitry 2 are shown. A broadband source of signals 3 have sufficient bandwidth to allow the reception of LORAN pulses without significant distortion to supply the LORAN pulses as well as undesired other signals falling within the band to both subsystems. Signal selection circuitry 1 responds to the strongest signal whose duty cycle exceeds a predetermined value and generates a wave whose frequency is offset from that of the strongest signal by a predetermined amount. The wave is applied to signal processing circuitry 2 to shift the frequency of all the signals received within the broadband so that the strongest signal is shifted to a special frequency within the band of a signal processor. The strongest signal is operated

on by the attenuating notch of a notch filter. The resultant output signals, with the strongest interfering signal attenuated, are then fed directly to a LORAN receiver 4.

Applicant submits that the cited references, either alone or in combination, do not disclose or suggest a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of the at least one strongest signal with respect to the other of the plurality of signals. As discussed above with reference to claim 20, applicant maintains that Dent does not disclose or suggest at least this feature. Applicant also submits that Dishal does not disclose or suggest this feature, even if it is accepted that Dishal teaches that which the Office Action alleges, which applicant does not admit.

Dishal describes using a signal selection circuitry 1 to generate a wave. The wave is applied to signal processing circuitry 2 to shift the frequency of all the signals received. The strongest signal is shifted to a special frequency according to Dishal. Dishal does not disclose or suggest using a filter that is adjustable to attenuate only within another frequency band. Instead, Dishal mixes the received signals with the adjustable signal to shift the frequencies of the received signals so that an interfering signal matches the frequency band of a notch filter. An adjustable filter is not used by Dishal. Dishal does not disclose or suggest using an adjustable filter in mixing or shifting the signals.

In contrast, present claim 22, by virtue of its dependence on claim 20, recites "a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of said at least one strongest signal with respect to the

other of said plurality of signals." Applicant submits that the cited references, either alone or in combination, do not disclose or suggest at least this feature of the pending claims. Thus, applicant respectfully requests that the obviousness rejection of claim 22 be withdrawn.

Claims 26-28 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Dent in view of U.S. Patent No. 5,852,651 (Fischer et al.). The Office Action took the position that Dent disclosed all the features of claims 26-28 except a splitter for dividing the signals. The Office Action then alleged that Fischer provided the elements of claims 26-28 missing from Dent. Applicant respectfully traverses the obviousness rejection and submits that cited references, either alone or in combination, do not disclose or suggest all the features of any of the presently pending claims.

Claims 26-28 depend directly or indirectly from claim 20. Claim 20 is summarized above. Applicant submits that claims 26-28 include the patentable features of claim 20, as well as other features.

Fischer relates to a cellular communication system with sectorization. Fischer describes a radio frequency signal from a main antenna being filtered to a first set of filters 1, one for each signal assigned to a microcell. The combined filtered main signal is then applied to an analogue to digital converter. A second set of filters receives a diversity signal from the diversity antenna. The diversity signal also is applied to the analogue to digital converter. Fischer describes the strongest signal being selected for use in accordance with conventional diversity technology.

Applicant maintains that Dent does not disclose or suggest all the features of claim 20, as discussed above. Applicant also submits that Fischer, alone or in combination with Dent, does not disclose or suggest all the features of the pending claims. Applicant submits that Fischer does not disclose or suggest a filter for attenuating only within a frequency band and adjustable to attenuate only within another frequency band of one of the at least one strongest signal with respect to the other of the plurality of signals. Fischer describes the strongest signal being selected for further processing after filtering. The filter of Fischer is not adjustable. Further, the analogue to digital converter of Fischer is not coupled to an identifying means for identifying the selected signal. Further, the strongest signal of Fischer does not pass through a filter that is adjustable. Thus, Fischer does not disclose or suggest at least these features of the pending claims.

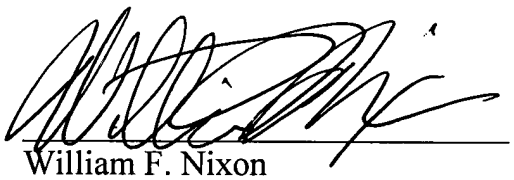
As discussed above, claim 20 is not rendered obvious by the cited references, either alone or in combination. Claims 26-28 depend directly or indirectly from claim 20. If an independent claim is nonobvious, then any claim dependent therefrom also is nonobvious. MPEP 2143.03. Therefore, applicant respectfully submits that claims 26-28 are not disclosed or suggested by the cited references, either alone or in combination. Applicant respectfully requests that the obviousness rejection of claims 26-28 be withdrawn.

Therefore, it is submitted that each of claims 20-38 recite subject matter that is neither disclosed nor suggested by the cited references. It is therefore respectfully requested that all of claims 20-38 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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